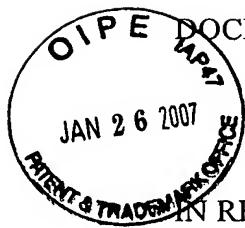


IFW



DOCKET NO.: 283236US2X PCT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN RE APPLICATION OF:

Hiroyuki OCHIAI, et al.

SERIAL NO: 10/560,070

GROUP: 2190

FILED: December 9, 2005

EXAMINER:

FOR: METAL PRODUCT PRODUCING METHOD, METAL PRODUCT, METAL  
COMPONENT CONNECTING METHOD, AND CONNECTION STRUCTURE

**LETTER**

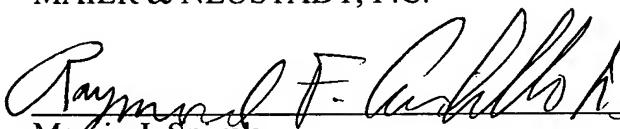
Mail Stop DD  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith is a Singaporean Written Opinion for the Examiner's consideration.  
The reference(s) cited therein have been previously filed on March 7, 2006.

Respectfully Submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



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(OSMMN 03/06)

RF 240

**In Reply Please Quote Our Reference**

Your Ref : 1026219PAT/ISHIKAWA/VHS/PS  
Our Ref : 2005080544/061122/TMRMI/1105  
Date : 22/11/2006  
Writer's Direct Line : 63302748

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ROBINSON ROAD POST OFFICE  
SINGAPORE 905667

150  
23 NOV 2003

Dear Sir,

**Singapore Patent Application No.: 200508054-4**

**Title of invention:** METAL PRODUCT PRODUCING METHOD, METAL PRODUCT, METAL COMPONENT CONNECTING METHOD, AND CONNECTION STRUCTURE

Applicant(s): ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD. (JP)

## INVITATION TO RESPOND TO WRITTEN OPINION

We forward with this letter a copy of the Search Report and Written Opinion drawn up by the Examiner in connection with your request for a Search and Examination Report.

You are invited to respond to the opinion by submitting:

- (a) Written submissions or arguments disagreeing with the Examiner's opinion and/or
- (b) An amendment of the specification of the application.

If you intend to respond, the response must be filed within 5 months from the date of this letter. You are also advised to inform us early if you do not intend to respond.

The Examiner will proceed to establish the Examination Report if no response is received by the end of the prescribed period.

If you have any further queries, please do not hesitate to contact the undersigned.

Thank you.

Yours faithfully,

  
ROZANA MISNI  
for REGISTRAR OF PATENTS  
SINGAPORE

# AUSTRALIAN PATENT OFFICE

## WRITTEN OPINION

		Date of mailing day/month/year	24 OCT 2006
Applicant's or agent's file reference  1026219PAT/ISHIKAWA/VHS/PS		REPLY DUE within FIVE MONTHS of the date of the Registrar's letter enclosing the written opinion	
Application No.  SG 200508054-4	Application Filing Date (day/month/year)  11 June 2004	Priority Date (day/month/year)  11 June 2003	
International Patent Classification (IPC) (as indicated in the search report)			
Int. Cl.  C23C 26/00 (2006.01)      B23H 5/00 (2006.01) B22D 29/00 (2006.01)      C21D 9/50 (2006.01)			
Action Date: 16 October 2006			
Applicant  ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO LTD			

1. This First written opinion consists of a total of 5 sheets.
2. This opinion contains indications relating to the following items:
  - I  Basis of the opinion
  - II  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - III  Lack of unity of invention
  - IV  Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - V  Certain documents cited
  - VI  Certain defects in the application
  - VII  Certain observations on the application
3. This opinion is based upon the assumption that the priority claim is valid.
4. The search report used was issued by the Australian Patent Office, and the date of completion is: 16 October 2006
5. If no reply is filed, the examination report will be established on the basis of this opinion.
6. The date by which the examination report will be established is: 11 September 2007

Name and mailing address  AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile no. 61 2 62853929	Authorized Officer  GREGORY DIVEN
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## I. Basis of the opinion

1. This opinion has been drawn on the basis of:

the application as originally filed.

the description, pages 1-6, 8-11, 14-16, 20 and 22, as originally filed, pages 7, 12, 13, 17, 18, 19, 21 and 23, filed with the request, pages , received on with the letter of

the claims, pages , as originally filed, pages 24-27, filed with the request, pages , received on with the letter of

the drawings, sheets/fig. 1-14-14/14, as originally filed, sheets/fig. , filed with the request, sheets/fig. , received on with the letter of

the sequence listing part of the description: pages , as originally filed pages , filed with the demand pages , received on with the letter of

2. The amendments have resulted in the cancellation of: pages:

sheets of drawings/figures No :

3  This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box.

4. Additional observations, if necessary:

## III. Lack of unity of invention

1. This Office found multiple invention in this application, as follows:

The Australian Patent Office has determined that the application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to from a single general inventive concept.

1. Claims 1-14 are directed to a method for producing a metal product comprising molding a main body of metal, removing a portion defining a defect to form a recess portion, depositing a deposition from an electrode to fill the recess. It is considered that the method comprises a first special technical feature.
2. Claims 15-20 are directed to a method of joining pieces of metal comprising metal components with a bevelled edge which define a recess portion when butted against each other and depositing a deposition form an electrode into the recess portion. It is considered that the method comprises a second special technical feature.

The common feature linking these sets of claims relates to forming a recess in the metal, or between metal strips and depositing a deposition from an electrode into the recess. Such methods describe standard methods of welding well known to people skilled in welding. Accordingly the claims do not relate to one invention or to a single inventive concept, a priori.

2. Consequently, the following parts of the application were the subject of examination in establishing this report:

all parts.

the parts relating to claims Nos.

**IV. Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	YES
	Claims 1-20	NO
Inventive step (IS)	Claims	YES
	Claims 1-20	NO
Industrial applicability (IA)	Claims 1-20	YES
	Claims	NO

**2. Citations and explanations**

03/07/06 The following documents identified in the Search Report have been considered for the purposes of this report:

JP 62-161493  
 JP 09-192937  
 JP 04-309452  
 JP 61-017398

**Novelty (N) and Inventive Step (IS)**

The invention defined in claims 1-20 is not novel (and does not involve an inventive step) when compared with the JP 62-161493 prior art document that discloses all the essential features of the invention claimed.

JP 62-161493 describes the repair of a metal tool by creating a recess in the tool where the crack exists and depositing into the recess using an electrode.

**Industrial Applicability (IA)**

The claims are related to products capable of commercial application.

**VII. Certain observations on the application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The claimed invention is patentable according to Section 13(2); or  
 The claimed invention is unpatentable according to Section 13(2) because: